Oregon
Theodore Kulongoski, Governor

Department of Environmental Quality
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July 16, 2010

Mr. Richard Vincent
Port of Portland
Marine & Industrial Development
Box 3529
Portland OR 97208

RE: No Further Action for Port of Portland Tract O Property,
N Ramsey Road, Rivergate Area, Portland, ECSI File #5307

Dear Mr.Vincent:

The Department of Environmental Quality has completed its review of "*Site Investigation Report of Port of Portland Tract O, Portland, Oregon*", dated April 2010 and has determined that a No Further Action is appropriate for this property. The site investigation report summarized all existing information regarding status and conditions at the property. Contamination was detected in soil and groundwater at low concentrations in portions of the site and generally did not exceed appropriate risk-based criteria. The presence of low concentrations of contaminants is not expected to present an unacceptable risk of exposure and is considered by DEQ to be protective of human health and the environment. The attached memo constitutes both a NFA for the property as well as a Source Control Decision without requirement for further action.

Because the site is upland to the Willamette River Superfund site, an evaluation of the stormwater pathway was conducted for a Source Control Decision. DEQ's cleanup section responsible for work on Willamette River Superfund Site upland areas, and EPA Region 10, were consulted regarding the NFA determination. Because the City of Portland Bureau of Environmental Services' stormwater pipeline discharging at City outfall 53A (adjacent to superfund site areas of concern in the river) crosses the property, they were also consulted regarding the NFA for the property. All comments received from these parties have been addressed in the attached NFA memo.

This NFA determination is being issued administratively with no public comment required, per criteria set forth for Willamette River Superfund Site upland sites. All work under the existing Letter Agreement between DEQ and the Port of Portland regarding the Tract O property has been satisfactorily completed and therefore the agreement can be terminated. Once all outstanding DEQ oversight costs have been paid, the Letter Agreement will be terminated and a NFA notation will be made for the property in DEQ's Environmental Cleanup Site Information system.

If you have any questions regarding this determination you may contact me at 503-667-8414 x55009 or gilles.bruce@deq.state.or.us. DEQ appreciates your efforts to address environmental conditions at the Tract O property.

Sincerely,

Bruce Gilles
Manager, NWR Cleanup & Emergency Response

attachment: DEQ NFA Memo dated July 15, 2010

pc: David Ashton, Port of Portland; Rod Struck, City of Portland Bureau of Environmental Services; Mavis D. Kent, Matt McClincy, Charlie Landman, DEQ; Larry Edelman, ODOJ

State of Oregon
Department of Environmental Quality Memorandum

To: Bruce Gilles, Manager
Cleanup & Emergency Response 7/15/10

Date: July 15, 2010

From: Mavis D. Kent, Project Manager

Subject: Final No Further Action Memo
Port of Portland Tract O
N. Ramsey Boulevard west of intersection with N. Rivergate Boulevard
Portland, Oregon
ECSI #5307

This memorandum presents the basis for the Department of Environmental Quality determination of No Further Action for the Port of Portland Tract O site.

BASIS FOR NFA DETERMINATION

DEQ has completed a review of the document entitled *Site Investigation Report Port of Portland Tract O, Portland, Oregon,* dated April 2010, for the Tract O property located at N. Ramsey Boulevard west of the intersection with N. Rivergate Boulevard, in Portland. The work described in the April 2010 report was conducted pursuant to a scope of work outlined during a project meeting between the Port of Portland and DEQ on March 8, 2010. During the project scoping meeting, DEQ and the Port discussed work that would be required to support DEQ's intention to propose an NFA for the property. The work consisted mainly of compiling information from existing recent documentation, including *Phase I Environmental Site Assessment Report, Port of Portland Ramsey Acquisition, North Ramsey Boulevard, Portland, Oregon* dated March 4, 2008, and *Phase II Subsurface Soil Investigation Report, Rivergate Caustic Terminal Project Land Acquisition, Portland, Oregon,* dated June 2008, supplemented by additional information requested by DEQ during the project scoping meeting including a discussion of recent Willamette River sediment sampling data and stormwater flow and management on the property.

Based upon a review of the April 2010 investigation report and information contained in the site file, DEQ has concluded that an NFA determination is appropriate for this site. The NFA determination is based on the regulations and facts as we now understand them, including but not limited to the points discussed in the following subsections.

Site Regulatory Status

The Tract O property is currently owned by the Port of Portland; the Port is in the process of selling the Property to the adjacent landowner, J. R. Simplot Company. The Port entered into a Letter Agreement with DEQ on March 17, 2010, to conduct a site investigation and prepare a site investigation report. The purpose of the site investigation report was to compile existing information to support DEQ's preparation of documentation proposing a NFA for the property. In a separate action, J. R. Simplot will participate in the Prospective Purchaser Program by entering into a Consent Judgment with DEQ prior to purchase of the property.

The Tract O property is located upland adjacent to the US EPA Portland Harbor Superfund Site. Several

issues were considered in collaboration with the DEQ Cleanup Program staff responsible for work on Portland Harbor Superfund Site upland source control evaluations. These issues included adequacy of site investigation, documentation required for a site source control decision and the need for a public comment period. Additionally, EPA Region 10 was consulted on the source control decision for this site. The conclusions were to move forward with the NFA process with the information that has already been submitted for the property, to provide the basis for a source control decision within this NFA memo and that no public comment period is required. Therefore, the NFA determination and source control decision are presented in this memo and no public comment period was held.

Location and Description

The site is about 2.8 acres in size and located in the Rivergate industrial area of Portland, in Multnomah County Oregon, at T.2N.R1W Sec 26 & 27, Tax Lot 2N1W26C 800 and 2N1W26C 900. The property is bordered to the north by J. R. Simplot Company, to the south by Ash Grove Cement Company, to the east by the continuation of N. Ramsey Boulevard, and to the west by the Willamette River (sees Figure 1). A City of Portland storm sewer line that discharges into the Willamette River via Outfall 53A crosses the site and is at elevations of 17.5 to 10 feet City of Portland datum, from east to west. DEQ is working closely with the City of Portland to identify upland sources contributing contamination to the City's Basin 53A stormwater system pursuant to the August 13, 2003, Intergovernmental Agreement (IGA) between the City and Oregon DEQ.

The Port purchased the property in the 1940s and it remains undeveloped. The northern property boundary is adjacent to the Simplot property fence, and the southern property boundary is adjacent to the Ash Grove property fence. Between the adjacent property fences, the Tract O property is grass covered except for the pavement of the westward extension of N. Ramsey Boulevard along the northern margin of the property adjacent to the Simplot property fence. Other property features include 70-foot and 30-foot natural gas pipeline easements along the northern and southern margins of the property, respectively, as well as road access easements for adjacent properties (see Figure 1).

The property is located adjacent to the Willamette River with its western boundary at the ordinary line of high water at 16.6 feet elevation. The eastern 1100 feet of the property is relatively flat at about 31 to 33 feet elevation, except for the western 300 feet which forms slightly westward sloping ground toward the steeply sloping Willamette River bank above the 16.6 feet elevation Property margin (see Figure 2). The site area is underlain by Pleistocene unconsolidated sediments to a depth of about 100 feet, then at depth by older geologic units including the Troutdale Formation and Columbia River Basalt Group. The upper 6 to 12 or more feet of soil across the site consists of fine- to medium-grained sand identified as fill; fill thickness is least in the eastern portion of the property. During drilling medium-grained sand and gravel with minor silt or clay lenses were encountered from ground surface to depths of up to 28 feet.

The Willamette River to the west is the primary surface water body in the vicinity of the site. Groundwater is present beneath the site at depths ranging from 5 to 20 feet below ground surface, from east to west, and groundwater flow is assumed to be to the west toward the river.

Land and Beneficial Water Use

Current and reasonably likely future land use for the site and in the site area is heavy industrial (IH) and the area has been designated by the City of Portland as industrial sanctuary. The property is currently used for access to adjacent properties. After purchase, J. R. Simplot's future development plans consist only of construction of three rail car lines through the center of the property, placement of gravel cover, and security fencing at the eastern property boundary. Stormwater facilities may be constructed at some time in the future, as part of J.R. Simplot's site stormwater system upgrade, and will be subject to compliance with the City of Portland's Stormwater Management Manual.

There is no significant ecological habitat present on the property or the properties to the north and south,

except for the riparian zone along the river, which overlaps the westernmost end of the Tract O property. About 50 feet of the property's western margin would be considered riparian zone and may provide some habitat for birds or small mammals.

Drinking water is not a current beneficial use of shallow groundwater beneath the property. Five domestic wells were identified in the vicinity of the Ash Grove property to the south as noted in the DEQ ECSI database for site #4696; DEQ did not consider the wells in current use for drinking water supply based on availability of drinking water from the City of Portland. Therefore, the main beneficial use of groundwater beneath the property is recharge to the Willamette River and support of aquatic life.

Stormwater Flow and Management

At present there are no stormwater collection or management facilities on the site. The northern margin of the 1300 plus foot (east-west dimension) by 90 foot (north-south dimension) strip of land is the N Ramsey Road pavement and the balance of the site is grass or vegetation covered. Rainfall infiltrates into the ground on all areas except for the westernmost steep and undeveloped Willamette River bank portion of the Property, west of a security fence-line, where some stormwater runoff may occur. Stormwater on adjacent J.R. Simplot and Ash Grove properties is collected and managed by those sites' stormwater systems and discharged under existing NPDES permits. No known pathway exists for stormwater runoff from the interior of the Tract O Property to the Willamette River. The BES stormwater line running beneath the site and discharging to the Willamette River west of the Property has no catch basin or other connections to surface stormwater at the Property.

Planned development of the property and the improvements currently proposed will change stormwater flow and management on the site. The City of Portland has indicated that these actions will trigger the City's Stormwater Management Manual (SWMM) and stormwater may be required to be treated by a vegetated pollution reduction facility before either infiltration to subsurface soil or discharge to the City's stormwater conveyance system. Implementation of the City's SWMM requirements should prevent stormwater contaminants from having a complete pathway to the river (see below).

Results of Site Investigation

The Phase II Subsurface Soil Investigation was conducted at the site in 2008 to determine whether hazardous substances were present in soil and groundwater at the Property. Ten soil borings were drilled and soil and groundwater samples collected (see Figure 3). Soil samples were collected generally at the water table ranging from 5 to 10 feet below ground surface; no samples of surface soil were obtained. Groundwater grab samples were obtained from six of the 10 borings.

Seven of the 10 soil samples were analyzed for total petroleum hydrocarbons, metals, pesticides, polychlorinated biphenyls, volatile organic chemicals, semi-volatile organic chemicals and polynuclear aromatic hydrocarbons. One of the 10 soil samples was analyzed for TPH as diesel. Six groundwater samples (unfiltered grab) were analyzed for combinations of TPH, metals, pesticides, PCBs, VOCs, SVOCs and PAHs. A summary of detections of chemicals in soil and groundwater is presented in the tables below. The analytical data was compared to background concentrations in soil for metals, soil risk-based concentrations for occupational direct contact, RBCs for direct contact with groundwater in an excavation, and DEQ Joint Source Control Strategy Screening Level Values for soil and groundwater.

Metals detected in soil, summarized in the table below, include arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury. These metals were detected at maximum concentrations that are below their DEQ default background concentrations, RBCs, and JSCS SLVs except for arsenic which exceeded its RBC by 3 times and mercury which exceeded its SLV by 7 times. In groundwater, arsenic, chromium and lead exceeded DEQ JSCS criteria by 2 orders of

magnitude, 1 order of magnitude, and 2 orders of magnitude, respectively. Arsenic is less than 20 percent of EPA's 2004 National Recommended Water Quality Criteria. Cadmium and silver were not detected above 1 ug/l which exceeds the DEQ JSCS criteria by 2 and 1 orders of magnitude respectively.

Chemical	Metals Results for Soil mg/kg				Metal Results for Groundwater ug/l		
	Maximum[1]	Background[2]	Soil RBC[3]	Soil JSCS SLV[5]	Maximum[1]	GW RBC[4]	DEQ JSCS[5]
Arsenic	3.17	7	1.6	64	27.3	5,800	0.045
Barium	129	Na	190,000	Na	282	25,000,000	Na
Cadmium	<0.639	1	810	1	<1	57,000	0.094
Chromium VI[6]	14.2	42	200	111[7]	55.9	190,000	11
Lead	4.77	17	800	17	70.8	Na	0.54
Selenium	<0.639	38	5,100	2	<2	Na	5
Silver	<0.639	86	5,100	5	<1	1,000,000	0.12
Mercury	0.509	Na	28	0.07	0.21	Na	0.77

(1) Maximum concentration, soil mg/kg, groundwater (total) ug/l.
(2) DEQ default background (2002), mg/kg.
(3) EPA Regional Screening Levels, Occupational soil direct contact, mg/kg.
(4) DEQ RBC, Excavation Worker, ug/l.
(5) DEQ Joint Source Control Strategy screening criteria, ug/l.
(6) Chromium not speciated, chromium VI not detected at <50 ug/l in source area.
(7) JSCS soil SLV is for total chromium.
Na = criterion not available.
Shaded cell indicates concentration of sample exceeds industrial RBC and/or background for soil, or trenchworker RBC or DEQ JSCS criteria for soil or groundwater.
Summary of sample detections from 2008 Phase II ESA.

Other chemicals detected in soil and groundwater, summarized in the table below, include diesel, heavy oil, and PAH constituents. PCB arochlors were not detected at detection limits ranging from 36 to 86.6 ug/kg. Maximum concentrations of diesel and heavy oil did not exceed any RBC criteria. There are no established DEQ JSCS criteria for petroleum diesel or heavy oil for groundwater at present; however the DEQ Cleanup Program is using a 1 mg/l screening level for total petroleum hydrocarbons for source control evaluations. Heavy oil was detected in groundwater at a maximum concentration of 1,480 ug/l in the eastern portion of the site adjacent to the N Ramsey pavement. This concentration exceeds the screening level of 1 mg/l TPH.

Several PAH constituents were detected in soil but at concentrations at least an order of magnitude below RBCs and JSCS SLVs. Pyrene (PAH) was detected in groundwater at a maximum 0.221ug/l which slightly exceeds the DEQ JSCS. No other PAH constituent was detected in groundwater at concentrations exceeding their RBC or the DEQ JSCS criteria, although the reporting limit for some of these constituents is about 9 times the DEQ JSCS criteria. There is no excavation worker RBC for most of these PAHs.

Arsenic is the only contaminant detected in soil above an occupational RBC, but at 3 mg/kg it is well below its DEQ background soil concentration of 7 mg/kg. In groundwater, arsenic, chromium, lead and pyrene were detected at concentrations that exceed only the DEQ JSCS criteria but not an RBC. The concentrations of these three chemicals may be slightly elevated because they were derived from a push probe grab groundwater sample where suspended solids may be present and may contribute to elevated chemical concentrations.

Chemical	Contaminant Results for Soil mg/kg			Contaminant Results for Groundwater ug/l		
	Maximum[1]	Soil RBC[3]	Soil JSCS SLV[5]s	Maximum[1]	GW RBC[4]	DEQ JSCS[5]
TPH-Dx	245	70,000	Na	565	>Saturation	
Heavy Oil	507	>100,000	Na	1,480	>Saturation	
Anthracene	0.0186	170,000	0.845	<0.095	Na	0.2
Benzo(a)anthracene	0.077	2.1	1.05	<0.095	9.1	0.018
Benzo(a)pyrene	0.077	0.21	1.45	<0.095	0.53	0.018
Benzo(b)fluoranthene	0.05	2.1	13	<0.095	Na	0.018
Benzo(ghi)perylene	0.0159	Na	0.3	<0.095	Na	0.2
Benzo(k)fluoranthene	0.0624	21	13	<0.095	Na	0.018
Chrysene	0.0817	210	1.29	<0.095	Na	0.018
Fluoranthene	0.183	22,000	2.23	<0.095	Na	0.2
Ideno(123-cd)pyrene	0.04	2.1	0.1	<0.095	Na	0.018
Phenanthrene	0.0897	Na	1.17	<0.095	Na	0.2
Pyrene	0.178	17,000	1.52	0.221	Na	0.2

(1) Maximum concentration, soil mg/kg, groundwater (dissolved) ug/l.
(2) DEQ default background (2002), mg/kg.
(3) EPA Regional Screening Levels, Occupational soil direct contact, mg/kg.
(4) DEQ RBC, Excavation Worker, ug/l.
(5) DEQ Joint Source Control Strategy screening criteria, ug/l.
Na = criterion not available.
Shaded cell indicates concentration of sample exceeds industrial RBC and/or background for soil, or trenchworker RBC or DEQ JSCS criteria for soil or groundwater.
Summary of sample detections from 2008 Phase II ESA.

Site data was evaluated against sediment data collected from the adjacent Willamette River as part of the Portland Harbor Superfund Remedial Investigation. This section of the Willamette River has been identified by EPA and the Lower Willamette Group as a preliminary area of concern including AOPC1A and AOPC1B. EPA identified contaminants of interest for these areas including metals (Cd, Cu, Hg, Zn), total LPAHs, PCBs, dioxins (total TEQ), pesticides (2,4'-DDT, delta-HCH, total DDx), and BnOH. Four sediment samples were obtained adjacent to the Property, including G033, G034, G035 and G038. The sediment samples were analyzed for pesticides, phthalates, PAHs, PCBs and metals. Except for PCBs and zinc, chemicals were either not detected in these samples or the detected concentrations were consistent with the lower range of detections throughout Portland Harbor.

Fate and Transport of Detected Contaminants

Groundwater beneath the Property is assumed to flow westward toward the Willamette River. Any contamination present in groundwater would be presumed to flow along with groundwater toward the river. Chemicals detected in soil and groundwater that exceed risk screening criteria, including metals and PAHs, do not readily dissolve in water and tend to adsorb to soil particles. These chemicals, detected at very low concentrations, would not be expected to reach the Willamette River surface water at concentrations exceeding DEQ JSCS criteria.

No surface stormwater pathways to the river were identified because essentially all site stormwater infiltrates into the ground. The City stormwater pipe that crosses the site to outfall 53A may lie below the water table beneath portions of the property and therefore represents a potential preferential pathway to the river. City staff report consistent dry weather flow from outfall 53A (Rod Struck, 7/13/10, personal communication) indicating possible infiltration of groundwater into the stormwater pipeline. Contaminants present in groundwater beneath the property are not

considered a current source of contamination to the river via this preferential pathway for the following reasons: (a) some constituents do not have established JSCS criteria (diesel and oil), (b) most contaminants are at concentrations below their JSCS criteria (PAHs), (c) several constituents in river sediments are not detected on the property (pesticides and PCBs), (d) potential inflow to the stormwater pipeline from site groundwater, if it occurs, is likely only a small fraction of total inflow to the full length of the pipeline, and (e) grab groundwater samples were not filtered and detected concentrations likely overestimate actual dissolved concentrations present in groundwater beneath the site. Therefore, DEQ concludes that the identified soil or groundwater contamination poses a low threat to the river and source control or remedial actions are not warranted..

As noted above, planned development of the property will change onsite stormwater flow and management. In the future, stormwater may have to be treated by a vegetated pollution reduction facility before infiltrated to subsurface soil or discharged to the City's stormwater conveyance system. Future infiltration of stormwater is not anticipated to leach known soil contaminants or adversely impact groundwater quality or the river for the following reasons: (a) contaminants that exceed risk screening criteria are present at low concentrations and do not readily dissolve in water and tend to adsorb to soil particles; (b) current stormwater infiltration at the facility, as discussed above poses a low threat to the river; and (c) stormwater will likely be treated in the future prior to infiltration further reducing the threat to the river.

Protectiveness of the NFA

Contaminants detected in site soil and groundwater do not exceed occupational risk levels therefore site conditions are protective of human health. Contaminants detected in groundwater are not likely to migrate to the Willamette River or discharge at concentrations that exceed the DEQ JSCS criteria. No other complete pathway from the Property to the Willamette River is present.

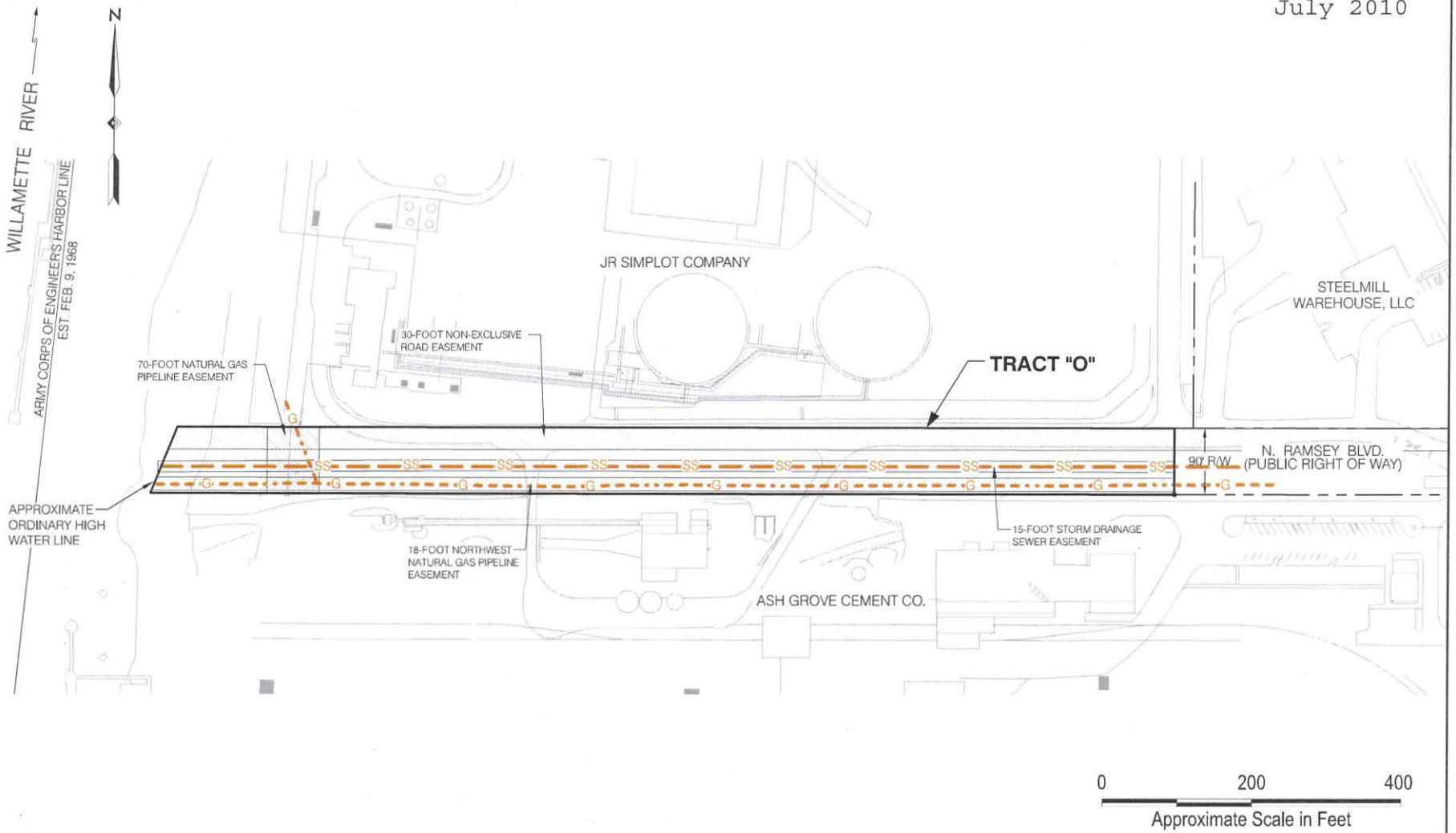
CONCLUSIONS

Based on review of the April 2010 Site Investigation Report, DEQ has determined that the Port of Portland Tract O Property has me the requirement of the current Letter Agreement by demonstrating that conditions at the Property are protective of human health and the environment.

DEQ has determined that because PCBs were not detected in soil and there is no other significant source of contamination on the Property and, with the possible exception of a minimal amount of runoff from the undeveloped riparian zone at the western site margin, no stormwater discharge occurs from the Property to the Willamette River, the Property is not considered to be a significant source of contaminants to Willamette River through either the stormwater or bank erosion pathway. DEQ concludes that based on the information presented to date, no further action will be required to address environmental contamination in soil or shallow groundwater beneath the Property under the Oregon Environmental Cleanup Law, ORS 465.200 et seq., unless new or previously undisclosed information becomes available. No public comment period will be held for this action as it is not required under Oregon's cleanup law or under the current Portland Harbor Superfund site stormwater source control decision process. No press release will be issued.

The Letter Agreement can be terminated after all DEQ oversight costs have been paid and this NFA action will be noted in the DEQ Environmental Cleanup Site Information database. A final invoice will be issued in the next billing cycle after issuance of the NFA notification. DEQ will provide the property owners a final invoice for oversight costs at the next billing cycle. When final oversight payment has been received, DEQ will update the ECSI database to reflect this decision.

July 2010



0 200 400

Approximate Scale in Feet

Legend:

SS Storm Sewer Line

G Gas Line

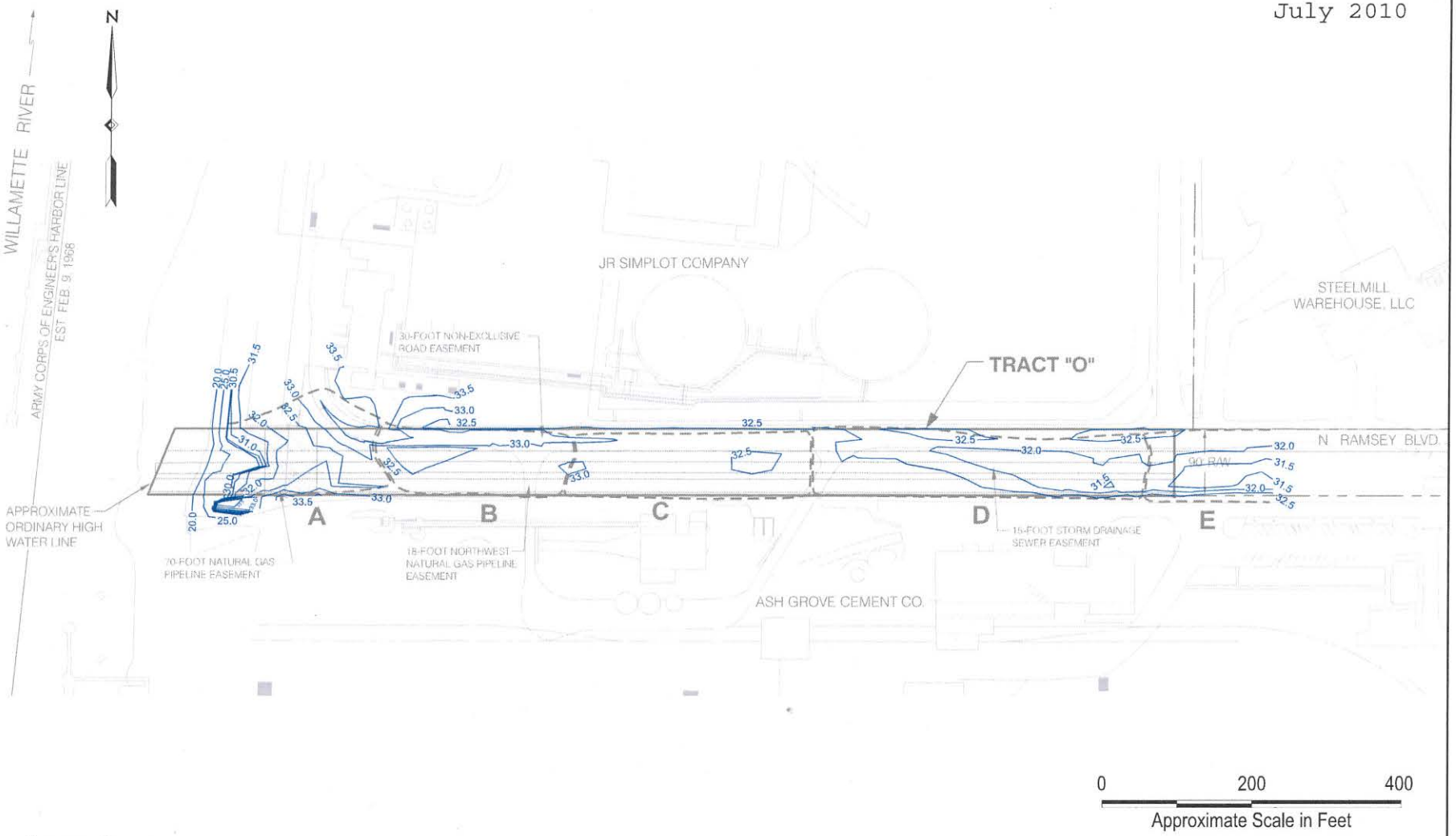
SOURCE:

1) Base map from Port of Portland Drawing Parcel Site, Exhibit A (RG 2009-4) dated October 2009.

Site Plan

Figure 1

July 2010



Legend:

33.5 —— Ground Surface Contour (0.5 Foot Contour Interval)

A ⟨ ⟩ Drainage Basin Area

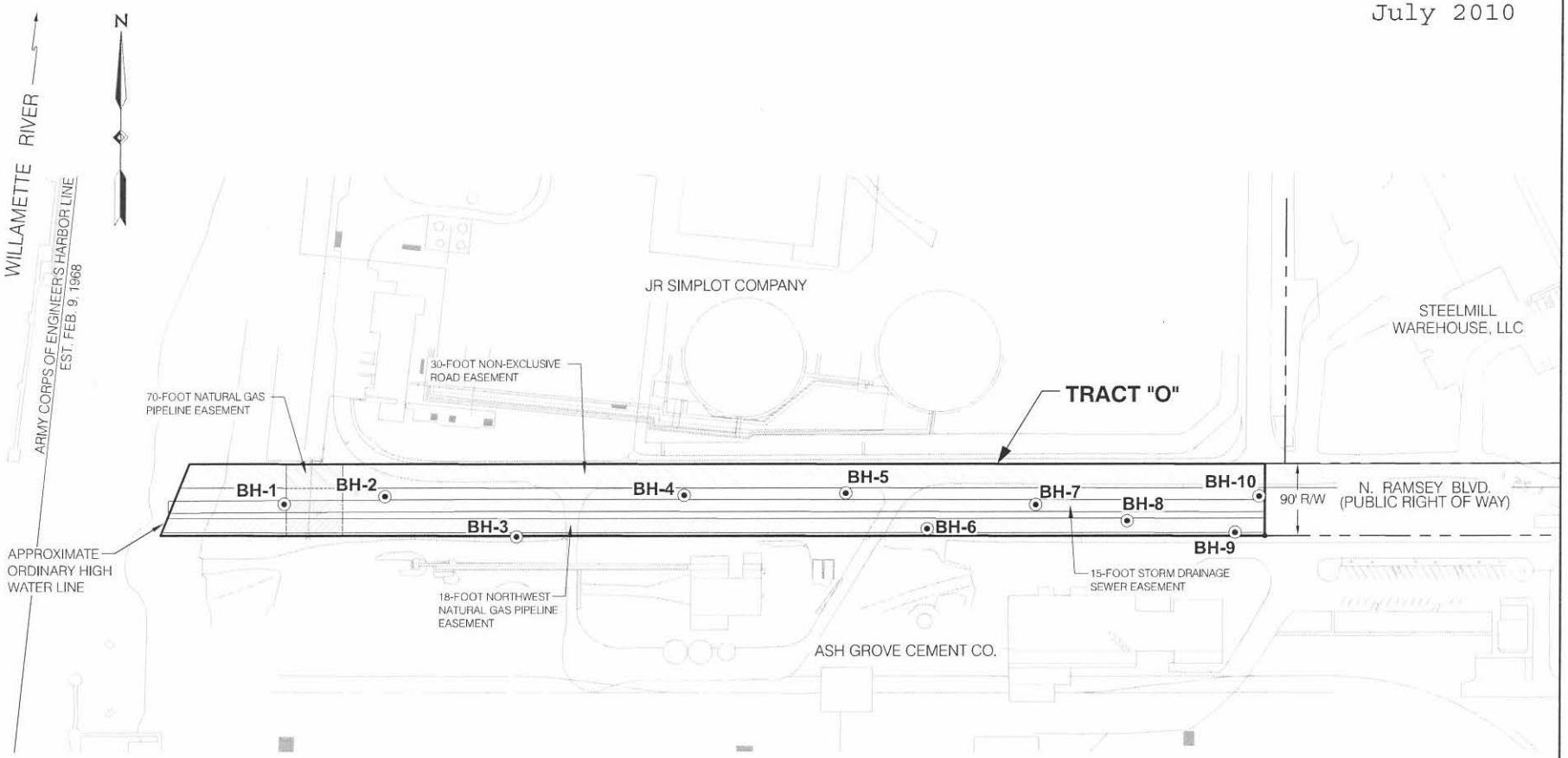
SOURCES:

1) Base map from Port of Portland Drawing Parcel Site, Exhibit A (RG 2009-4) dated October 2009.
2) Contours from Harris Group Drawing Site Layout dated March 2010.

Surface Topography

Figure 2

July 2010



0 200 400

Approximate Scale in Feet

Legend:

BH-4 ⊙ Soil Boring Location

SOURCES:

1) Soil boring locations from a Site Map by PBS&J dated March 6, 2008.
3) Base map from Port of Portland Drawing Parcel Site, Exhibit A (RG 2009-4) dated October 2009.

Exploration Plan

Figure 3